

Serial No: 09/936,354

Olbert et al.

PF 49845

APPENDIX I

SPECIFICATION AMENDMENTS:

Amend the specification of the application as set forth the following:

Page 11, lines 7-14, please rewrite the paragraph as follows:

50 kg steatite (magnesium silicate)-rings haing an outer diameter of 8 mm, a length of 6 mm and a wall thickness of ~~1,5~~1.5 mm were heated to 160 °C in a coating pan and spray-coated with a supsension of ~~28,6~~28.6 kg anatase having a BET surface of 20 m²/g, ~~2,1~~2.19 kg vanadyl oxalate, ~~0,1~~0.176 kg cesium sulphate, ~~44,1~~44.1 kg water and ~~9,1~~9.14 kg formamide until the weight of the applied coating yielded ~~10,5%~~10.5% of the total weight of the catalyst (after calcination at 450 °C).

Page 11, lines 15-18, please rewrite the paragraph as follows:

The catalytic coating thus applied, i.e. the catalyst shell, consisted of ~~4,0~~4.0 percent by weight vanadium (calculated as V₂O₅), ~~0,4~~0.4 percent by weight cesium (calculated as Cs) and ~~95,6~~95.6 percent by weight titanium dioxide.

Page 11, lines 21-29, please rewrite the paragraph as follows:

50 kg steatite (magnesium silicate) -rings having an outer diameter of 8 mm, a length of 6 mm and a wall thickness of ~~1,5~~1.5 mm were heated to 160 °C in a coating pan and spray-coated with a suspension of ~~28,6~~28.6 kg anatase having a BET surface of 20 m²/g, ~~4,1~~4.11 kg vanadyl oxalate, ~~1,0~~1.03 kg antimony trioxide, ~~0,1~~0.179 kg ammonium dihydrogenphosphate, ~~0,04~~0.045 kg cesium sulphate, ~~44,1~~44.1 kg water and ~~9,1~~9.14 kg formamide until the weight of the applied coating yielded ~~10,5%~~10.5% of the total weight of the catalyst (after calcination at 450 °C).

Page 11, lines 30-35, please rewrite the paragraph as follows:

The catalytic coating thus applied, i.e. the catalyst shell, consisted of ~~0,1~~0.15 percent by weight phosphorus (calculated as P), ~~7,5~~7.5 percent vanadium (calculated as V₂O₅),

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3,23.2 percent by weight antimony (calculated as Sb_2O_3), 0,1 0.1 percent by weight cesium (calculated as Cs) and 89,0589.05 percent by weight titanium dioxide.

Page 11, lines 40-47, page 12, lines 1-5, please rewrite the paragraph as follows:
A tube bundle having an external diameter of $d_{\text{RBa}} = 5.435$ m was located in the reactor of the present invention. The tube bundle consisted of about 14,000 catalyst tubes made of steel which each had a length of 3.5 m and an external diameter d_a was thus 1.3793. 4 standard m^3/h of air having a loading of 98.5% purity by weight o-xylene of 90 g/standard m^3 were passed through the tube from the top downward. The catalyst tubes were filled in a manner to provide for two catalyst zones with different activity. Firstly, catalyst II was filled into each tube to a total height of (as measured from the bottom of the tubes) of 1,31.3 m. Then a total 1,71.7 m catalyst I was filled into each tube on top of the catalyst II layer.

Page 4, first paragraph, line 2, please rewrite the paragraph as follows:

We have found that this object is achieved by the multitube reactor having the features of claim 12 as described herein. According to the present invention, it is proposed that in the case of relatively large reactors in which a large amount of heat of reaction is generated owing to the numerous catalyst tubes and has to be removed, the ratio of tube spacing t to external tube diameter d_a be made dependent on the reactor diameter or on the external tube bundle diameter d_{RBa} . In particular, the present invention proposes providing a ratio of tube spacing t to external tube diameter d_a of at least 1.3. Preferably, the catalyst tubes are arranged such that three adjacent tubes form a triangle, preferably a equilateral triangle. In this case, tube spacing t is equal to the length of the sides of the triangle.